

# **ABSTRACT**

A method of monolithically fabricating an LDMOS transistor with a fabrication process that is compatible with a sub-micron CMOS fabrication process. The specification further describes an LDMOS transistor. The LDMOS transistor is implemented in a first  
5 impurity region on a substrate. The LDMOS transistor has a source that includes a second impurity region. The second impurity region is implanted into the surface of the substrate within the first impurity region. Additionally, the LDMOS transistor has a drain that includes a third impurity region. The third impurity region is implanted into the surface of the  
10 substrate within the first impurity region. The third impurity region is spaced a predetermined distance away from a gate of the LDMOS transistor. The drain of the LDMOS transistor further includes a fourth impurity region within the third impurity region. The fourth impurity region provides an ohmic contact for the drain.

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